

ABSTRACT

A method of fabricating an apparatus including a sealed cavity and an apparatus embodying the method are disclosed. To fabricate the apparatus, a device chip including a substrate and at least one circuit element on the substrate is fabricated. Also, a cap is fabricated. Next, the device chip and the cap are bonded such that a sealed cavity is formed by the device chip and the cap. The bond is accomplished using thermo compression technique. Gold or other suitable metal can be used as a bonding agent. Then or at the same time, caulking agent is reflowed over the bonding agent, over portions of the cap, or both to further seal the cavity. In the resultant device, the sealed cavity is sealed by the bonding agent, the caulking agent, or both. The caulking agent increases hermeticity of the cavity and provides for even higher level of protection of the cavity against adverse environmental conditions.